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Method and apparatus for electrochemical planarization of a workpiece

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Para la

An electrochemical planarization apparatus for planarizing a metallized surface on a workpiece includes a polishing pad and a platen. The platen is formed of conductive material, is disposed proximate to the polishing pad and is configured to have a negative charge during at least a portion of a planarization process. At least one electrical conductor is positioned within

workpiece against the polishing pad. The power source applies a positive charge to the workpiece via the electrical conductor so that an electric patential difference between the merallized surface of the workpiece and the platen is created to remove at least a portion of the metallized surface from planarization process. At least one electrical conductor is positioned within the platen. The electrical conductor has a first end connected to a power source. A workpiece carrier is configured to carry a workpiece and press the the workpiece.

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BRIEF SUMMARY:

TECHNICAL PIELD

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[0001] The present invention relates, generally, to systems for polishing planarizing workpieces, such as semiconductor wafers. More particularly, relates to an apparetus and method for electrochemical planarization of a having a metallized surface. or it. wafer

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BACKGROUND

(19) United States

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() METHOD AND APPARATUS FOR ELECTROCHEMICAL PLANARIZATION OF A WORKPIECE

(23)

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ABSTRACT

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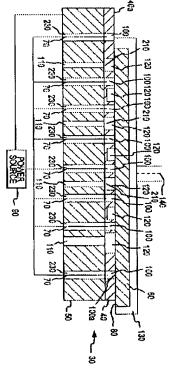
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workpiece

An electrochemical planarization apparatus for planarizing a metallized surface on a workpiece includes a polishing pad so that an electric potential difference between the metal-lized surface of the workpiece and the platen is created to is configured to carry a workpiece and press the workpiece have a negative charge during as least a portion of a remove at least a portion of the metallized surface from the first end connected to a power sonrce. A warkpiece carrier disposed proximate to the polishing pad and is configured to and a platen. The platen is formed of conductive material, against the polishing pad. The power source applies pianarization process. At least one electrical conductor positive charge to the workpiece via the electrical conductor positioned within the platen. The electrical conductor has a

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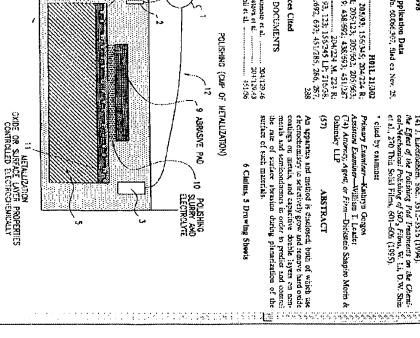
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